Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1-3. (*Cancelled*)

4. (*Previously Presented*) An amplifier circuit comprising:

a first transistor; and

a biasing circuit including a process compensation circuit, the biasing circuit being coupled to a gate of the first transistor;

wherein the process compensation circuit includes a replica device circuit having

a replica transistor that replicates the characteristics of the first transistor, and

a constant current source coupled to the replica transistor.

5. (*Original*) The circuit of claim 4, wherein the replica transistor is connected as a diode.

6. (*Previously Presented*) The circuit of claim 4, wherein the process compensation circuit and the first transistor are included in a single integrated circuit.

7. (*Cancelled*)

8. (*Previously Presented*) An amplifier circuit comprising:

a first transistor; and

a biasing circuit including a process compensation circuit, the biasing circuit being coupled to a gate of the first transistor;

wherein the biasing circuit further includes a bias control circuit coupled to the gate of the first transistor; and

wherein the bias control circuit includes a variable current source coupled to a control circuit.

9. (*Original*) The circuit of claim 8, wherein the control circuit includes a digital to analog converter.

10. (*Cancelled*)

11. (*Currently Amended*) An amplifier circuit comprising:

a first transistor; and

a biasing circuit including a process compensation circuit, the biasing circuit being coupled to a gate of the first transistor;

wherein the biasing circuit further includes a temperature compensation circuit coupled to the gate of the first ~~translator~~ transistor; and

wherein the temperature compensation circuit includes a temperature proportional current source.

12. (*Previously Presented*) The circuit of claim 11, wherein the temperature compensation circuit and the first transistor are included in a single integrated circuit.

13. (*Previously Presented*) The circuit of claim 4, wherein the amplifier circuit is included within a transmitter.

14. (*Previously Presented*) The circuit of claim 4, wherein the amplifier circuit is included within a wireless data link transmitter.

15. (*Previously Presented*) A method of supplying a process compensated DC bias voltage comprising:

generating a current using a constant current source;

producing the process compensated DC bias voltage in a process compensation circuit based on the current; and

applying the process compensated DC bias voltage to a gate of a first transistor, the process compensation circuit and the first transistor being on a single integrated circuit.

16. (*Previously Presented*) A method of supplying a process compensated DC bias voltage comprising:

producing the process compensated DC bias voltage in a process compensation circuit; and

applying the process compensated DC bias voltage to a gate of a first transistor, the process compensation circuit and the first transistor being on a single integrated circuit;

wherein the process compensated DC bias voltage is substantially equal to a threshold voltage of the first transistor.

17. (*Original*) The method of claim 15, further comprising adjusting the process compensated DC bias voltage to select a desired class of operation for the first transistor.

18. (*Original*) The method of claim 17, wherein adjusting the process compensated DC bias voltage includes receiving a control signal.

19. (*Original*) The method of claim 18, wherein the control signal includes a digital control signal.

20. (*Previously Presented*) The method of claim 19, wherein receiving the control signal includes converting the digital control signal to an analog signal.

21. (*Original*) The method of claim 15, further comprising adjusting the process compensated DC bias voltage to compensate for a temperature of the integrated circuit.

22. (*Previously Presented*) A data link system comprising:

a first transmitter including an amplifier that includes:

a first transistor; and

a biasing circuit including a process compensation circuit, the biasing circuit being coupled to a gate of the first transistor, wherein the process compensation circuit and the first transistor are included in a single integrated circuit;

wherein the process compensation circuit includes a replica device circuit having

a replica transistor that replicates the characteristics of the first transistor, and

a constant current source coupled to the replica transistor.

23. (*Previously Presented*) A power amplifier circuit comprising:

a first transistor; and

a biasing circuit coupled to a gate of the first transistor, the biasing circuit including:

a process compensation circuit;

a bias control circuit coupled to the gate of the first transistor; and

a temperature compensation circuit coupled to the gate of the first transistor, wherein the process compensation circuit, the temperature compensation circuit and the first transistor are included in a single integrated circuit; and

wherein the temperature compensation circuit includes a temperature proportional current source.